CLAIMS:

- What is claimed is: A method, in a server, comprising:
- receiving data from a server application; 1
- determining whether the data is serializable; and
- storing the data in a data structure and forwarding, 2 3
- to a client, a reference to the data structure if the 4
- data is not serializable.
 - The method of claim 1, wherein the data structure 2.
- comprises a hash table. 1
 - The method of claim 2, wherein the reference to the
 - data structure comprises a hash key. 1
 - The method of claim 1, further comprising: 1
 - receiving argument data from a client;
 - determining whether the argument data is a reference 2 3
 - to a complex object; and
 - retrieving the complex object from the data 5
 - structure if the argument data is a reference to a 6
 - complex object.
 - The method of claim 4, wherein the argument data 1
 - comprises an argument in a server application call.
 - The method of claim 5, further comprising: 6. 1

- passing the complex object as the argument in the
- 2 server application call.
- 1 7. A method, in a server, comprising:
- 2 receiving argument data from a client;
- determining whether the argument data is a reference
- 4 to a complex object; and
- 5 retrieving the complex object from a data structure
- 6 if the argument data is a reference to a complex object.
- 1 8. The method of claim 7, wherein the data structure
- 2 comprises a hash table.
- 1 9. The method of claim 7, wherein the reference to the
- 2 complex object comprises a hash key.
- 1 10. The method of claim 7, wherein the argument data
- 2 comprises an argument in a server application call.
- 1 11. The method of claim 10, further comprising:
- 2 passing the complex object as the argument in the
- 3 server application call.
- 1 12. An apparatus, in a server, comprising:
- 2 receipt means for receiving data from a server
- 3 application;
- 4 determination means for determining whether the data
- 5 is serializable; and



- 1 storage means for storing the data in a data
- 2 structure and forwarding, to a client, a reference to the
- 3 data structure if the data is not serializable.
- 1 13. The apparatus of claim 12, wherein the data
- 2 structure comprises a hash table.
- 1 14. The apparatus of claim 13, wherein the reference to
- 2 the data structure comprises a hash key.
- 1 15. The apparatus of claim 12, further comprising:
- means for receiving argument data from a client;
- 3 means for determining whether the argument data is a
- 4 reference to a complex object; and
- 5 means for retrieving the complex object from the
- 6 data structure if the argument data is a reference to a
- 7 complex object.
- 1 16. The apparatus of claim 15, wherein the argument data
- 2 comprises an argument in a server application call.
- 1 17. The apparatus of claim 16, further comprising:
- 2 means for passing the complex object as the argument
- 3 in the server application call.
- 1 18. An apparatus, in a server, comprising:
- 2 receipt means for receiving argument data from a
- 3 client;

- determination means for determining whether the
- 2 argument data is a reference to a complex object; and
- 3 retrieval means for retrieving the complex object
- 4 from a data structure if the argument data is a reference
- 5 to a complex object.
- 1 19. The apparatus of claim 18, wherein the data
- 2 structure comprises a hash table.
- 1 20. The apparatus of claim 18, wherein the reference to
- 2 the complex object comprises a hash key.
- 1 21. The apparatus of claim 18, wherein the argument data
- 2 comprises an argument in a server application call.
- 1 22. The apparatus of claim 21, further comprising:
- 2 means for passing the complex object as the argument
- 3 in the server application call.
- 1 23. A computer program product, in a computer readable
- 2 medium, comprising:
- instructions for receiving data from a server
- 4 application;
- 5 instructions for determining whether the data is
- 6 serializable; and
- 7 instructions for storing the data in a data
- 8 structure and forwarding, to a client, a reference to the
- 9 data structure if the data is not serializable.



1	24.	Α	computer	program	product,	in a	computer	readable

- 2 medium, comprising:
- 3 instructions for receiving argument data from a
- 4 client;
- 5 instructions for determining whether the argument
- 6 data is a reference to a complex object; and
- 7 instructions for retrieving the complex object from
- 8 a data structure if the argument data is a reference to a
- 9 complex object.